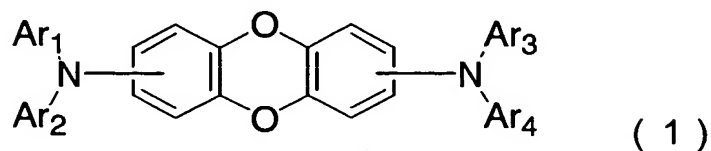


What is claimed is:

1. An aminodibenzodioxin derivative represented by general formula (1);



wherein Ar₁, Ar₂, Ar₃, and Ar₄ are substituted or unsubstituted aryl groups and Ar₁, Ar₂, and the nitrogen atom bonded thereto or Ar₃, Ar₄, and the nitrogen atom bonded thereto may form a nitrogen-containing heterocyclic ring.

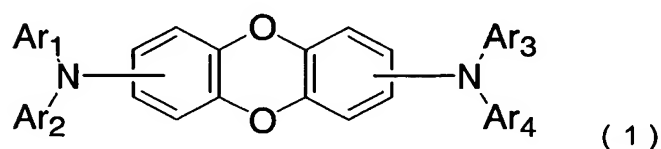
2. An aminodibenzodioxin derivative as described in claim 1 wherein Ar₁, Ar₂, Ar₃, and Ar₄ are independently any one of phenyl group, naphthyl group, and phenanthryl group, either unsubstituted or substituted with lower alkyl groups, lower alkoxy groups, aryl groups of 4 to 10 carbon atoms, or aryloxy groups of 4 to 10 carbon atoms.

3. An organic electroluminescent element comprising an anode, organic layers, and a cathode piled one upon another on a substrate and comprising the aminodibenzodioxin derivative described in claim 1 or 2 in at least one of said organic layers.

4. An organic electroluminescent element as described in claim 3 wherein the organic layer comprising the aminodibenzodioxin derivative is selected from the group of the light-emitting layer, hole-transporting layer, and hole-injecting layer.

Abstract

This invention relates to a highly reliable material for an organic electroluminescent element exhibiting high luminance, high luminous efficiency, little deterioration in emission, and suitability for use and storage at high temperatures and to an organic electroluminescent element using said material. The material is a diaminodibenzodioxin derivative represented by general formula (1)



wherein Ar₁, Ar₂, Ar₃, and Ar₄ are substituted or unsubstituted aryl groups and Ar₁, Ar₂, and the nitrogen atom bonded thereto or Ar₃, Ar₄, and the nitrogen atom bonded thereto may form a nitrogen-containing heterocyclic ring; and this diaminodibenzodioxin derivative may be incorporated in the light-emitting layer, the hole-transporting layer, or the hole-injecting layer of an organic electroluminescent element.